UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,945	08/09/2006	Dusan Miljkovic	100700.0024US1	2506

34284 7590 12/12/2008

Rutan & Tucker, LLP.
611 ANTON BLVD
SUITE 1400
COSTA MESA, CA 92626

EXAMINER	
MEHTA, HONG T	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
12/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,945	MILJKOVIC ET AL.	
	Examiner	Art Unit	
	HONG MEHTA	4152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *January 13, 2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to application 10/552945 filed on October 13, 2005. Claims 1-20 are pending. Claim 1, 15 and 19 are independent claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> **A person shall be entitled to a patent unless –**
>
> **(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.**

5. Claims 1-5, 12-16 and 19 are rejected under 35 U.S.C. 102 (b) as being anticipated by Boniello et al. (US 4,867,992 A) further evidenced by Fabian et al. (WO 9742831 A1) and Blanc et al. (J. Agric. Food Chem. 1998) and Duvick et al. (US 5,792,931 A).

6. Regarding claim 1, 15, 16 and 19, Boniello et al. discloses an food product (col. 1, lines 12-14) a combination of water and a combination of soluble coffee solids including ground roast coffee and coffee by-products, e.g. pulp, coffee husks and mucilage (col. 2, lines 61). Examiner notes the pulp, coffee husks and mucilage are part of coffee cherry fruit. Additionally, Examiner notes that nutrient media containing water beverage encompasses tea drink. Furthermore, the claims include mycotoxin levels of 0, and no mention of these mycotoxins is mentioned in Drunen et al.

7. It is further expected that the composition of Boniello et al. would fall within the scope of claim 1, 15, 16 and 19, since the claimed end product may encompass a wide range of amount of

mycotoxin, aflatoxin, fumonisins and ochratoxins depending on the way in which the product is produced, the source within the coffee cherry and the ratio of the coffee cherry to other ingredients are employed. Due to the natural presence of a preservative in coffee cherry, it is further expected that the amount of the same in the product of the Boniello would provide the same amount of preservative effect.

8. Further, it is inherently known in the art of coffee processing, emphasized by Fabian et al., to have food product by a process of removing micotoxins from green coffee wherein the micotoxins are ochratoxins and aflatoxins (aphlatoxins). It is known that quantities of these micotoxins in the coffee are in actual fact extremely small in a few ppb – parts per billon (pg 1, lines 1-6). Duvick et al. (paragraph 75) emphasized many different types of mycotoxins which are natural present of a preservative in coffee cherry as a fumonisins. It is further expected that the low range amount of the same in the product of Fabian would provide the some amount preservation effect. Additionally, Blanc el al. discloses that ochratoxin A (OTA) is a nephrotoxic and nephrocarinogenic mycotoxin produced by several fungal species from the *Aspergillus* genus and by *Penicillium verrucosum*. Blanc et al. also discloses that natural occurrence of OTA in green coffee beans have been reports by several authors in concentrations ranging between 0.2 and 360 μg/kg or 0.2 and 360 ppb (Introduction).

9. Regarding claims 2-5 and 12-14, Boniello et al. discloses food product, beverage (Abstract and col. 2, lines 29-33) wherein the preparation of the quick-dried coffee cherry comprise a ground fragment and extract of coffee cherry (col. 2, lines 57-63). Examiner notes that nutrient media containing water beverage encompasses tea drink.

10. Claims 1-5, 12-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Drunen et al. (US 6,572,915 B1), and evidenced by Fabian et al. (WO 9742831 A1) and Blanc et al. (J. Agric. Food Chem. 1998).

11. **Regarding claim 1, 15, 16 and 19**, Drunen et al. teaches a food product prepared from coffee cherry (Abs., col. 52-55) and quick dried (col. 3, lines 7-8). Column 2, lines 18-48 teach a process by which the antioxidants are extracted. It is further expected that the composition of Drunen et al. would fall within the scope of claim 1, 15, 16 and 19, since the claimed end product may encompass a wide range of amount of mycotoxin, aflatoxin, fumonisins and ochratoxins depending on the way in which the product is produced, the source within the coffee cherry and the ratio of the coffee cherry to other ingredients are employed. Due to the natural present of a preservative in coffee cherry, it is further expected that the amount of the same in the product of the Drunen et al. would provide the same amount of preservative effect. Furthermore, the claims include mycotoxin levels of 0, and no mention of these mycotoxins is mentioned in Drunen et al.

12. Further, it is known in the art of coffee processing emphasized by Fabian et al. to have food product by a process of removing micotoxins from green coffee wherein the micotoxins are ochratoxins and aflatoxins (aphlatoxins). It is known that quantities of these micotoxins in the coffee are in actual fact extremely small in a few ppb – parts per billon (pg 1, lines 1-6). Duvick et al. (paragraph 75) emphasized many different types of mycotoxins which are natural present of a preservative in coffee cherry as a fumonisins. It is further expected that the low range amount of the same in the product of Fabian would provide the some amount preservation effect. Additionally, Blanc el al. discloses that ochratoxin A (OTA) is a nephrotoxic and

nephrocarinogenic mycotoxin produced by several fungal species from the *Aspergillus* genus and by *Penicillium verrucosum*. Blanc et al. also discloses that natural occurrence of OTA in green coffee beans have been reports by several authors in concentrations ranging between 0.2 and 360 μg/kg or 0.2 and 360 ppb (Introduction).

13. With respects to claims 2 and 3, Drunin et al. teaches food product wherein the coffee cherry comprises a ground fragment of the coffee cherry (col. 4, Example III, line 46; Example IV, line 61; col. 5, Example V, line 8); extract from ground fragment of coffee cherry (col. 3, lines 34-37, 47-54 and 60-62).

14. With respects to claims 4 and 5, Drunin et al. teaches food product wherein the coffee cherry comprises extract (col. 3, lines 60-62) of hull (col. 1, lines 18-19); pulp (col. 4, Example I, line 3); bean and mucilage (col. 1, line 59).

15. With respects to claims 12 and 13, Drunin et al. teaches food product is a tea from coffee cherry (col. 1, line 14). Examiner notes that beverage reads on tea beverage composition.

16. **With respects to claim 14**, Drunin et al. teaches food product is nutritional supplement in liquid or solid form and comprising an extract of the coffee cherry (col. 3, lines 35-44).

17. With respects to claim 17, Drunin et al. teaches block of natural extract foodstuff of coffee cherry with polyphenol concentration (col. 3, lines 47-53) to be use in part of a beverage.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. Claims 6-11, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boniello et al. (US 4,867,992 A) or Drunen et al. (US 6,572,915 B1) further in view of Sivetz et al. (Coffee Technology 1979).

22. Regarding claims 6-11, 18 and 20, Boniello et al. and Drunin et al. disclose to claims 1, 15, and 19 as discussed above the coffee cherry agricultural food product is a by product of the processing of coffee. Boniello et al. or Drunen et al. do not to disclose the coffee cherry ripeness waste by-product after the processing of coffee production.

23. With respects to claims 6-11, 18 and 20, Sivetz et al. discloses the ripe coffee fruit, losing chlorophyll, green to yellow to red as the cherry coffee fruit matures for coffee processing (pg. 74, paragraph 3) and is stripped off in all stages of ripeness (pg. 76, paragraph 2). Sivetz et al. discloses green coffee cherries without red color and blemished area (pg. 76, paragraph 3) to be dried either mechanical drier for "quick drying" or on the sun-drying, solar radiation in ambient air terrace for coffee processing. Sivetz et al. discloses the mixture of cherry coffee may be as high as 15% of green cherry coffee fruit to red cherry coffee fruit at beginning stage of coffee processing harvest (pg. 75).

24. Boniello et al., Drunen et al. and Sivetz et al. are analogous art because they are from the same filed of endeavor of beverage foodstuff. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Boniello et al., Drunen et al. and Sivetz et al. before him or her, to modify the stages of coffee cherry of Drunen and Boniello to include all the ripeness stages and drying options of coffee cherry in coffee processing of Sivetz et al. to obtain the agricultural crop coffee waste of Drunen et al. ('915, col.1, line 17-18).

25. The suggestion of administrating the extracts as a food, beverage or nutritional supplement by improving the quality and nutritional content of the foodstuffs for consumption ('915, col. 1, lines 41-46).

26. Therefore, it would have been obvious to combine Sivetz et al. with Drunen et al. or Boniello et al. to obtain the invention as specified in the instant claims.

Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Duvick et al. (US 7,670,189), Fabian et al. (WO 9742831 A1) and Blanc et al. (J. Agric. Food Chem. 1998).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HONG MEHTA whose telephone number is (571)270-7093. The examiner can normally be reached on Monday thru Thursday, from 7:30 am to 5:00 pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached 571-273-3201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

htm

/Joseph S. Del Sole/
Supervisory Patent Examiner, Art Unit 4152